MEMORANDUM

April 12, 2005

TO: County Council

FROM: Sue Richards, Program Evaluator

Suzanne Langevin, Research Assistant Kristen Latham, Research Assistant Office of Legislative Oversight

SUBJECT: OLO Memorandum Report 2005-5: Research on Gang Prevention and

Intervention

EXECUTIVE SUMMARY

The County Executive's FY 06 Recommended Operating Budget includes \$5.4 million in gang prevention initiatives. Two programs specifically target gang members or youth at-risk for gang membership; the rest provide services Countywide, especially for at-risk youth. The evaluation research shows specific therapeutic approaches, outdoor adventure programs, and job programs targeted to at-risk youth can improve skills and behaviors. It also shows police gang units using specific strategies can reduce gang violence. Evaluations of collaborative approaches are still underway.

Introduction. During this year's budget worksessions, four Council Committees (ED, PHED, HHS and PS) will review 10 gang prevention initiatives recommended for funding in the County Executive's FY 06 Recommended Operating Budget. These initiatives total \$5.4 million.

The Recommended Budget proposed these initiatives in response to two task force reports. Following the release of the second report, *The Montgomery County Gang Prevention Task Force Report and Recommendations*, the Council approved a scope for OLO's Project on Gang Prevention and Intervention that requests a summary of the published research on programs that address gang violence. This report is organized as follows:

Part A summarizes the gang prevention initiatives in the Recommended Budget; **Parts B and C** present research findings related to the Executive's initiatives; and **Part D** provides national data about the prevalence and characteristics of gangs.

A. Gang Prevention Initiatives in the Recommended FY 06 Operating Budget

The County Executive's Recommended Operating Budget for FY 06 proposes \$5.4 million in gang prevention initiatives to address the County's emerging gang problem. Specifically, the County Executive recommends the Council appropriate \$4 million (74%) to MCPS and \$1.4 million (26%) to the County Government.

Table 1 displays the proposed initiatives and recommended funding. (Note: The Executive's Budget also proposes funding for two grants and several other department programs that target at-risk youth or at-risk families, but these are not identified as gang prevention initiatives.¹)

Table 1. County Executive's Recommended FY06 Budget Gang Prevention Initiatives

Agency/ Department	Program Title	Proposed Funding	% of Total	
	Class Size Reduction	\$2,243,443		
MCPS	Extended Day/Year Program	\$1,064,290		
MCFS	Collaborative Action Process	\$511,985		
	Evening High School	\$156,514		
	MCPS Subtotal	\$3,976,232	74%	
Health and	Crossroads Youth Opportunity Center	\$359,770		
Human Services	Gang Prevention Coordinator (.8 WY)	\$83,390		
Description	Outdoor Adventure Program	\$250,000		
Recreation	Club Friday	\$22,100		
Economic Dev.	Economic Dev. Summer Youth Employment for At-Risk Youth			
Police	Gang Task Force Unit Officers (incl. vehicles)	\$597,900		
	County Government Subtotal	\$1,442,410	26%	
GRAND TOTAL \$5,418,642				

Source: OLO and OMB, April 2005.

B. Evaluation Research for the Recommended Gang Prevention Initiatives

The County Executive's package of gang prevention initiatives reflects a broad range of program purposes and proposed service activities. Most programs propose to serve at-risk youth throughout the County; two programs target youth who are gang members or at-risk for gang involvement. The table on the next page displays the proposed target population and available evaluation research for each service delivery initiative. Part C provides more details about the research evaluation literature for select programs.

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¹ A Community Empowerment Grant (CEG) for \$25,000 to the YMCA of Metropolitan Washington, Youth and Family Services would fund a sports program, academic tutoring, and National Night Out Activities for 100 at-risk students at Blair High School; another CEG grant for \$22,600 to Identity would fund a needs assessment of middle and high school Latino youth who reside in Montgomery County. Examples of other department proposals for at-risk youth and at-risk families are: Linkages to Learning, the Latino Health Initiative, the African American Health Program, the Asian Health Initiative, and an expansion of after school programs at five community centers.

 Table 2. Evaluation Research Highlights for Proposed Budget Initiatives

Agency/ Dept	Program Title	Proposed Target Population	What does research say about outcomes for similar programs?	Does research measure gang related outcomes?	For more detail, see
	Class Size Reduction	MCPS middle and high school students	Children in smaller classes have higher rates of academic achievement and graduation.	No	C1
	Extended Day/ Extended Year	MCPS middle school students	Children improve academically and are more engaged in school.	No	C2
MCPS	Collaborative Action Process	MCPS middle and elementary school students	MCPS evaluations show a decline in special education referrals and placements.	No	C3
	Evening High School	MCPS high school students	One observational study showed benefits for those who attend voluntarily.	No	C4
	Crossroads Youth Opportunity Center – Therapy	At-risk youth in Takoma Park/Langley Park	At-risk youth show less delinquent behavior and lower rates of aggressive behavior due to specific therapeutic programs.	No	C5
DHHS	Crossroads Youth Opportunity Center –Street Outreach Worker	At-risk youth in Takoma Park/Langley Park	Evidence mixed. Evaluations in the 1960s reported increased gang cohesion and delinquent behavior. An evaluation of modified model in 2003 showed fewer gang behaviors among younger youth only.	Yes	C6
Recreation	Outdoor Adventure Program	All youth	Delinquent youth had lower rates of recidivism and higher rates of self-esteem.	No	C7
	Club Friday	All youth	OLO did not find any relevant evaluation studies.		
Economic Dev.	Summer Youth Employment for At-Risk Youth	At-risk youth	Evidence mixed. Some studies find at-risk youth become employed, improve skills, and reduce criminal activities.	No	C8
MCPD	Gang Task Force Unit Officers	Gang members, gang involved youth, and at- risk youth	Evidence mixed. Some later studies report decline in gang violence and serious crime reduction. Specialized units conduct investigations that are more effective and track data more reliably.	Yes	С9

Source: OLO, April 2005.

C. A Review of Evaluation Research for Selected Programs

This section presents more details about the evaluation results summarized in Table 2. To find evaluation research similar to the initiatives in the County Executive's Recommended Budget, OLO conducted Internet research and reviewed program listings compiled by the United States Department of Justice, Office of Juvenile Justice and Delinquency Prevention (OJJDP) and the Center for the Study and Prevention of Violence (CSPV).

The evaluation studies vary widely in their methodology and rigor. The evaluation studies found through the OJJDP or CSPV program listings are generally rigorous scientific studies that support the classification of an approach as a model, promising or effective program.² In contrast, many other studies are informal, observational or descriptive studies. Although the results of these informal studies are informative, they cannot be used to draw conclusions about program impacts or overall effectiveness.

C1. Class Size Reduction

OLO found numerous evaluation studies of the effects of class size reduction on school performance. The most extensive and frequently cited study, the Tennessee Student Teacher Achievement Ratio (STAR), examined the effects of smaller class sizes on 7,000 students in 79 schools. The study found that students placed in smaller class sizes in grades K-3 (maximum of 17 students vs. maximum of 25 students in control classes) had better high school graduation rates, higher grade point averages, and were more inclined to pursue higher education. (Project STAR, 2003)

C2. Extended Day or Extended Year

OLO found two studies of extended day and extended year programs which specifically addressed at-risk youth. These programs provided a mix of academic tutoring and recreational activities in a supervised setting. Teachers tutored students and taught study skills; aides or community volunteers provided recreational programs. The evaluation research showed children who participated in these programs were more engaged in school and improved academically. The studies also reported children felt safer during after school hours. (Ross et al., 1996, Brooks et al., 1996)

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² Listings of model programs use different criteria and rating classification systems to report the effectiveness of prevention programs designed to reduce or eliminate behaviors such as violence, substance abuse or delinquency. The OJJDP Model Programs Guide uses three rating categories with the following criteria: 1) exemplary programs must show strong positive effects on preventing delinquency or reducing or enhancing risk or protective factors using the highest quality evaluation, i.e. an experimental design with a randomized sample; 2) effective programs must show modest effects on delinquency prevention using an experimental or quasi-experimental design; and 3) promising programs must demonstrate effects using limited research or non-experimental designs. The Center for the Study and Prevention of Violence, which established the Blueprints Model Program, uses two classifications categories: promising and model programs. To be designated a Promising program, a program must show evidence of a deterrent effective on violence, delinquency, aggression, or drug use using an experimental or quasi-experimental research design. To be designated a Model program, a program must meet two additional criteria: it must have been replicated at more than one site with demonstrated effects and it must show the effects were sustained for at least one year.

C3. Collaborative Action Process

MCPS evaluations show a decline in special education referrals and placements.

C4. Evening High School

OLO did not find any reliable evaluations of evening high school programs; however, OLO did find one observational study of an evening high school program. This study, which reported the results of a survey of program attendees, found perceptions of the program's effectiveness varied widely; however, most of those surveyed agreed that people who attended voluntarily benefited from the program. (Groves, 1998)

C5. Crossroads Youth Opportunity Center – Therapy

OLO did not find any evaluation studies that reflected the proposed program approach, i.e., a therapeutic component combined with a street outreach worker. However, OLO did find evaluation studies that examined the effects of therapy and outreach workers separately. The section describes the research studies of different therapeutic approaches; the evaluation studies of outreach workers follows in Section C6.

Functional Family Therapy (FFT) is a short-term therapy program for at-risk youth between the ages of 11 and 18 and their families. The program, which varies from 12 to 30 hours, consists of clinical sessions, telephone calls, and in-person meetings to provide access to community resources. The CSPV designates FFT as a Model program and OJJDP designates FFT as an Exemplary program.

Evaluations of FFT show the program significantly reduces recidivism for a range of juvenile offenses. An evaluation conducted by the Washington State Institute for Public Policy found the participant group had lower recidivism rates for felonies than the control group, plus a lower overall recidivism rate. (Barnoski, 2002)

Behavioral Monitoring and Reinforcement Program (BMRP) is a two-year program for seventh and eighth graders that monitors a student's actions, rewards good behavior, and maintains communication among parents, teachers, and students. Teachers and students hold weekly small group meetings to discuss recent behavior patterns and pro-social alternatives to disruptive behavior. CSVP designates BMRP as a Promising program and OJJDP designates BMRP as an Effective program.

An evaluation of BMRP showed long-term positive effects. One year after the intervention ended, participating students displayed significantly fewer problem behaviors. During the 18 months following the program, participating students reported significantly less criminal behavior than other students. After five years, participating students were 66 percent less likely to have a juvenile record. (Bry, 2003)

Anger Coping Program is a school-based program designed to decrease conduct problems, delinquency, and substance abuse in school-aged boys. The program consists of weekly small group sessions that teach self-control, social problem solving, and social skills and strategies for managing conflict. Participants are also asked to establish weekly goals for themselves which teachers monitor. OJJDP designates Anger Coping as an Effective program.

Researchers conducted numerous evaluations and follow-up studies to measure outcomes of the Anger Coping Program. One evaluation of 76 boys between the ages 9 and 12 who were screened for aggressive behavior found that students who received treatment exhibited lower rates of disruptive and aggressive off-task behavior in the classroom compared to students in the control group. Parents of the students who received therapy also reported lower rates of aggressive behavior themselves than comparison parents. (Lochman, 1992)

Adolescent Transitions Program (ATP) is a multilevel, family-centered intervention delivered in a middle school setting. It is designed to improve parental management skills and develop adolescents' goal setting skills, peer supports, and problem-solving abilities. The program provided 12 weekly, 90-minute sessions for groups of eight adolescents. It used presentations and videotapes to teach social and individual skills. The program also provided 12 weekly sessions for parents to practice management skills which were then tried at home. The program also convened open discussion groups of teens and parents.

A quasi-experimental design evaluation of ATP conducted in 1982 found no effect. This initial study consisted of a one year follow-up testing of 158 self-referred families with adolescents between the ages of 10 and 14 who were randomly assigned to four treatment groups. The study found that parents of adolescents in each of the treatment groups and the control group reported significant reductions in problem behavior at home and that adolescents in one of the treatment groups exhibited higher levels of school problems than those in the control group. (Dishion and Andrews, 1995)

In 1999, researchers conducted a study that replicated the original research design. This time, the results showed that adolescents in one of the four treatment groups showed a significant reduction in their externalizing behavior compared to those in the control group. OJJDP has designated ATP as an Exemplary program based on the results of the replication study. (Irvine et al, 1999)

C6. Crossroads Youth & Community Opportunity Center - Street Outreach Worker

Governments and nonprofit organizations have utilized street outreach workers to combat gangs since the 1940s. Initially, outreach workers engaged groups of gangmembers on the street, providing referrals to health care, job training, and recreational activities in an attempt to reconnect gang members to community institutions. The outreach workers were not closely managed by organizations sponsoring their work. Evaluations from the 1960s of detached worker programs of this type in Los Angeles, Boston and New York concluded

that they were ineffective and perhaps counter-productive. For instance, researchers observed that engaging a gang in recreational activities increased gang cohesion and contributed to increased delinquency.

Later, many detached worker programs shifted their focus from engaging gangs on the street to integrating gang members into existing programs. The Gang Intervention through Targeted Outreach program (GITTO), currently offered by the Boys and Girls Clubs of America at multiple sites nationally, is an example of this approach. This program provides gang members with opportunities for alternative activities, adult support, and a sense of belonging in an attempt to change their behaviors and values. GITTO activities are largely held outside of regular club hours, although the goal is to mainstream the participants into the larger club membership as soon as possible.

A 2003 evaluation of the GITTO program revealed no effect on the likelihood of a participant to join or leave a gang. Youths between the ages of 10 and 13 reported fewer gang behaviors in accordance with more frequent attendance, although this did not extend to older youth. (Spergel and Wa, 2003)

C7. Outdoor Adventure Programs

OLO found several evaluations and reviewed a meta-analysis of wilderness challenge programs for delinquent and at-risk youth that summarized the results of 28 studies. Outdoor adventure programs lead students in outdoor recreational activities such as wilderness camping expeditions or canoe trips. The programs generally include a small group and an instructor trained in outdoor activities and educational techniques.

The evaluation research shows outdoor adventure programs can reduce recidivism rates and increase self-esteem. A meta-analysis of programs for anti-social or delinquent youth conducted by Vanderbilt University found participants had lower rates of recidivism than non-participants. Also, programs with intense activities or therapeutic enhancements produced the greatest reduction in delinquency. (Wilson and Lipsey, 2000)

C8. Summer Youth Job Programs

OLO reviewed three evaluations of youth employment programs which include summer job components. These programs serve low-income youth between the ages of 14 and 21 who face barriers to employment. In addition to short-term paid employment, the programs provide tutoring, training, and counseling. These programs typically last six to 12 months.

Evaluations of these programs showed they generally improved skills, generated employment across most groups of students, and reduced involvement with crime. An evaluation of the Workforce Investment Act Youth Program showed 78% of participants between the ages 18 and 21 were employed six months after they completed the program and 66% of younger youth received their diploma or equivalent. (Workforce System Results, 2004) A 2001 evaluation of Job Corps conducted by Mathematica found Jobs Corps significantly reduced involvement with crime. (Burghardt et al, 2001)

C9. Gang Task Force Units

The evaluation research OLO found examined the activities of specialized police gang units, not the effects of creating a unit. The two most frequently cited studies of police activities to suppress gangs are evaluations of a gang suppression initiative in the Dallas Police Department and the Operation Ceasefire Program in Boston.

- The Dallas Police Department gang suppression initiative used strict enforcement of aggressive curfew and truancy laws and saturation patrols. Three areas emphasized curfew and truancy enforcement and two areas focused on saturation patrols. A quasi-experimental evaluation compared these five intervention areas to four similar control areas. The evaluation found a 57% decrease in gang-related violence in the target areas, compared to 37% reduction in violence in the control areas. The study found the largest declines in violent gang-related offenses in the target areas that used curfews and truancy enforcement. In contrast, the areas that used high visibility saturation did not show a statistically significant decrease in gang-related violence. (Fristch et al, 1999)
- The Boston Police Department's Operation Ceasefire provided increased police patrols in areas of high violence, outreach to gang members, and prioritized prosecutions of the most dangerous offenders. The program stressed investigations of gun trafficking in an effort to reduce violence. A quasi-experimental evaluation of the program, conducted by Harvard University, found significant reductions in youth homicide victimization and gun assault incidents in Boston. The researchers also conducted a trend comparison of other U.S. cities which found that there was no national trend that explained the drop in youth homicide in Boston at the time of Operation Ceasefire. (Braga et al, 2001)

OLO reviewed a study conducted by Arizona State University West that examined specialized police gang units in four cities. Each site had a unique organizational structure and all targeted predominantly Hispanic gangs. Researchers reviewed conducted field observations and interviewed gang unit officers, supervisors, and external stakeholders to determine how police gang units responded to community gang problems. (Katz, 2003) The study reported five general findings:

- Police gang units were an indirect response to an objective problem;
- There was an absence of control and accountability over the units;
- The production and dissemination of gang intelligence were most important benefits;
- The isolation of the gang unit from the rest of the force limited its capacity and effectiveness; and
- Police gang units did not practice community policing.

D. Gangs and Gang Membership Characteristics and Program Research

The National Youth Gang Center conducts an annual survey of law enforcement to track gang membership and disseminates research to help address youth gang problems.

- The most recent survey, completed in 2002, estimates there were approximately 21,500 gangs and 731,500 gang members in the United States in 2002.
- Most gang members are male between the ages of 14 and 24. The average age of a gang member is 17 or 18 years old. In cities with long-standing gang problems, gang members tend to be older.
- Membership rates in youth gangs vary from one jurisdiction to another. In a national school survey, 7% of boys and 4% of girls reported they had belonged to a gang in the last 12 months. In a survey of 6,000 students in 11 cities, 11% of eighth graders reported they were currently gang members.³
- According to the research, the two most common reasons youth cite for joining a gang are protection and to be with friends or family who are already gang members. A third reason is to sell drugs or make money. The research finds few youth who say they are forced to join a gang and many who said they could refuse to join without consequence.
- Only a few research studies have tracked the duration of gang membership. These studies found most youth report staying in a gang for less than one year. Studies in areas with chronic gang problems show more long-term patterns of gang membership.
- Gang members account for a disproportionate share of delinquent acts. Studies also show that while in a gang, members commit violent and serious offenses at a much higher rate than before or after being involved.
- There are five basic strategies to reduce gang violence: neighborhood mobilization, social intervention, opportunities provision, suppression and incarceration, and organizational strategies, such as a specialized police gang unit. Social agency youth development and law enforcement suppression strategies, which often clash, are the predominant approaches. Because gangs vary tremendously, researchers suggest communities conduct a thorough, collaborative assessment of their local problem.
- OJJDP, the federal agency charged with developing a national gang prevention policy, has funded several comprehensive approaches that call for community mobilization, opportunity provision, social intervention, suppression, and organizational change. An evaluation of an early model, the Little Village Gang Violence Reduction Project, found. Evaluations of more recent model collaborative programs are still underway.

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³ Typically, membership rates in areas with chronic gang problems are higher than rates in areas with an emerging problem. In a survey of high risk youth in Denver, Seattle, and Washington, membership rates ranged from 14% to 30%.

List of Resources

Arbreton, Amy J.A. and Wendy S. McClanahan. "Targeted Outreach: Boys and Girls Clubs of America's Approach to Gang Prevention and Intervention." Public/Private Ventures. March 2002.

Barnoski, Robert. "Washington State's Implementation of Functional Family Therapy for Juvenile Offenders: Preliminary Findings." Washington State Institute for Public Policy. 2002

Braga, Anthony A., David M. Kennedy, Elin J. Waring, and Anne M. Piehl. "Problem-Oriented Policing, Deterrence, and Youth Violence: An Evaluation of Boston's Operation Ceasefire." Journal of Research in Crime and Delinquency 38, no. 3. August 2001.

Brooks, P.E., et. al. "Final Evaluation Report. Longitudinal Study of LA's BEST After School Education and Enrichment Program." UCLA's Center for the Study of Evaluation. 1996.

Bry, Brenna. "Behavioral Monitoring and Reinforcement Program." Center for Substance Abuse Prevention's Western Center for the Application of Prevention Technologies. 2003.

Burghardt, John et al. "Does Job Corps Work? Summary of the National Job Corps Study." Mathematica Policy Research, Inc. June 2001.

Dishion, T. J., & Andrews, D. W. "Preventing Escalation in Problem Behaviors with High-risk Young Adolescents: Immediate and 1-year Outcomes." Journal of Consulting and Clinical Psychology, 63, 538-548. 1995.

Fristch, Eric J., Tory Caeti, and Robert W. Taylor. "Gang Suppression Through Saturation Patrol, Aggressive Curfew, and Truancy Enforcement: A Quasi-Experimental Test of the Dallas Anti-Gang Initiative." Crime and Delinquency, Vol. 45 No. 1. January 1999.

Groves, Paul. "Meeting the Needs of At-Risk Students: The Day and Night School." High School Journal. Vol. 81, Issue 4, p 251. April/May 1998.

Irvine, A.B., Biglan, A., Smolkowski, K., Metzler, C.W., & Ary, D.V. "The Effectiveness of a Parenting Skills Program for Parents of Middle School Students in Small Communities." Journal of Consulting and Clinical Psychology 67:811–825. 1999.

Katz, Charles M. and Vincent Webb. "Police Response to Gangs: A Multi-Site Study." Department of Criminal Justice and Criminology, Arizona State University West. December 2003.

Lochman, J. E. "Cognitive–Behavioral Intervention With Aggressive Boys: 3-Year Follow-Up and Preventive Efforts." Journal of Consulting and Clinical Psychology 60:426–32. 1993.

"Project STAR." Health and Education Research Operative Services. 2003.

Ross, S.M., Smith, L.J., Casey, J., & Slavin, R.E. "Evaluation of the Extended Day Tutoring Program in Memphis City Schools." Johns Hopkins Univ. for Research on the Education of Students Placed At-risk. 1996.

Spergel, Irving and Kwai Ming Wa. "The Little Village Gang Violence Reduction Project in Chicago." Illinois Criminal Justice Information Authority. 2003.

Wilson, Sandra Jo and Mark W. Lipsey. "Wilderness Challenge Programs for Delinquent Youth: A Meta-Analysis of Outcome Evaluations." Evaluation and Program Planning 23 pgs. 1-12. 2000.

"Workforce System Results." Employment and Training Administration, U. S. Dept. of Labor. 2004.

MEMORANDUM

TO: Health and Human Services Committee

FROM: Sue Richards, Program Evaluator, Office of Legislative Oversight

SUBJECT: Follow-up Information on the OJJDP Comprehensive Gang Model

At its budget worksession on April 14, the HHS Committee discussed DHHS's \$359,770 proposal for the Crossroads Community Youth Outreach Center, based on the Office of Juvenile Justice and Delinquency Prevention's (OJJDP) Comprehensive Gang Model. The table below summarizes the evaluation outcomes of various OJJDP program models. The results show the models have had mixed success.

Program Name	Dates	Program Population	Location of Implementation	Evaluation Results
OJJDP Gang Reduction Program	2003- Present	At-risk youth	Los Angeles, CA Milwaukee, WI N.Miami Beach, FL Richmond, VA	Evaluation is currently underway. (Urban Institute)
	1995-	Majority gang members or associates on probation/parole (258 youth)	Mesa, AZ	Generally Successful. Program youth experienced 18% fewer arrests than peers in control group.
OJJDP	Present ¹	Majority gang- involved or youth on probation/parole (182 youth)	Riverside, CA	Generally Successful. Program youth experienced fewer serious violent and other arrests compared to peers in control group. No effect on gang membership.
Comprehensive Gang Model	Comprehensive	Majority gang- involved youth on probation/parole (230 youth)	San Antonio, TX	Generally Not Successful. More program youth became gang members while fewer comparison youth remained gang-involved.
		Majority on probation/parole (125 youth)	Tucson, AZ	Generally Not Successful. No overall effect on arrests for serious violent, all violent, drug, or property crime.
		Gang-involved and at-risk youth	Bloomington, IL	Generally Not Successful. No effect on gang membership. Program youth experienced increased arrests. Did not adhere to program model.
Spergel Little Village Model	1992- 1997	Gang members	Chicago, IL	Program participants experienced a significant reduction in arrests for serious gang violence and drug crime in comparison to other gang members. (Irving Spergel, University of Chicago)

¹OJJDP currently funds the Riverside, CA and Mesa, AZ sites. Programs may have continued in the other sites with other funding.

TO: County Council

FROM: Sue Richards, Program Evaluator

Suzanne Langevin, Research Assistant Kristen Latham, Research Assistant Office of Legislative Oversight

SUBJECT: OLO Memorandum Report 2005-5: Research on Gang Prevention and

Intervention (Part 3)

EXECUTIVE SUMMARY

Public officials increasingly rely on evidence-based programs, risk factors, and logic models to direct public funds to proven, effective programs.

Evidence-Based Programs. There are approximately two dozen evidence-based programs that address youth gang problems. Most of these target the problem of gang violence. The evaluations of these programs measure results such as changes in the numbers of homicides or aggravated assaults or changes in arrest or recidivism rates. The evaluations of these programs show mixed results.

Another group of evidence-based programs address the problems of gang membership and delinquent behavior. Their evaluations measure results such as changes in delinquent activities, attitudes towards gangs, changes in gang membership status, and changes in affiliation with gang members. Results show these programs successfully engaged at-risk youth in alternative activities and modestly reduced delinquent behaviors. However, none of these programs produced reductions in gang membership. In some cases, programs designed to reduce gang membership actually had the opposite effect and increased gang cohesiveness.

Risk Factors. A risk factor is a behavior or environmental condition that increases the probability a person will suffer harm. Knowing the specific risk factors that have the strongest empirically established relationship to a problem, such as gang membership, can be a helpful program design tool if the risk factors are amenable to change. To date, researchers have identified a large number of risk factors associated with gang membership. Before risk factors can be used effectively to design programs aimed at reducing gang involvement, more work to find out which factors that have the strongest predictive value at what ages.

Logic models. A logic model is a diagram of a program's chain of reasoning. Seeing a program's chain of reasoning helps determine whether a problem has been described accurately and whether a program will address objectives related to the desired outcomes. **Introduction.** In May 2005, the County Council approved funding for \$4.4 million to fund some of the gang initiatives in the County Executive's FY 06 Recommended Operating Budget. These initiatives are intended to address the emerging gang problem in Montgomery County identified in a series of reports. Convened in 2004, the two task forces proposed

⁴ In January 2004, the County Executive's Latino American Advisory Committee issued a report, *Latino Gangs in Montgomery County: A Community Response*. In September 2004, the Montgomery County Collaboration Council published *An Assessment of Gang Activity in Montgomery County* and the County Executive forwarded to the

recommendations to reduce and eliminate gang activity and developed three principles to guide implementation of their recommendations. These principles call on the County to implement programs that:

- Address risk factors;
- Are culturally sensitive and reflect the diversity of the community; and
- Are evidence-based, with measurable outcomes, and built-in evaluation programs.⁵

Given these guiding principles, this report provides information to help public officials and program administrators develop an evidence-based strategy to address the County's emerging gang problem. It is organized as follows:

Section II presents the highlights of evaluation research for youth gang programs;

Section III what a logic model is and how it can be a useful program design tool; and

Section IV discusses the concepts of risk factors and evidence-based programs.

The appendices provide supporting information and detail, including a definition of terms, a methodology description, listings of programs by category, samples of logic models, and tables of risk factors. This memorandum supplements two earlier memoranda. Readers may contact OLO for copies of these memoranda or more detailed program information.

County Council *The Joint County Gang Prevention Task Force Final Report.* In February 2005, the Montgomery County Gang Prevention Task Force's *Final Report and Recommendations* was forwarded to the County Council ⁵ See the Executive Summary of the Joint County Gang Prevention Task Force Report at www.montgomerycountymd.gov/content/EXEC/GangTF/doc/jctf execsummary.pdf. The first principle states "By

www.montgomerycountymd.gov/content/EXEC/GangTF/doc/jctf execsummary.pdf. The first principle states "By addressing risk factors for gang involvement, a community can also address other issues faced by youth, young adults and their families, such as substance abuse, teen pregnancy, truancy and dropout rates, unemployment, bullying and mental health problems." The second principle states "All programs that address prevention, suppression and intervention, whether existing or new to the community, must be culturally sensitive and must reflect the diversity of the community in which they operate." The third principle states "All new programs that address prevention, intervention and suppression must be evidence-based, with measurable outcomes, and must have evaluation programs built in to monitor their effectiveness."

⁶ The first memorandum, dated April 12, 2005, examined evaluation research for initiatives in the County Executive's Recommended Budget. It found certain therapeutic approaches, outdoor adventure programs and job programs can improve skills and behaviors for at-risk youth, and police gang units using specific strategies can reduce gang violence. The second memorandum, dated May 3, 2005, reported that the evaluation results for seven different applications of the OJJDP Comprehensive Gang Model show these models have had mixed success.

I. RESEARCH EVALUATION HIGHLIGHTS

To find out "what works" to address the problem of youth gangs, OLO conducted a systematic literature review to find evidence-based programs. Appendix B (\bigcirc 2) describes OLO's identification, review, and study selection process. Appendices C (\bigcirc 3), D (\bigcirc 5) and E (\bigcirc 8) list the specific programs and their bottom-line evaluation results.

This section offers general observations on the evaluation research and highlights some of the studies that seem most relevant as Montgomery County moves ahead with the planning and implementation of programs to address the youth gang problem.

A. General Observations

- The body of evaluation research for youth gang programs is limited but growing. OLO's search for evidence-based programs identified 38 programs that specifically addressed a gang problem or measured a gang-related outcome, e.g., gang crime or gang membership.
- Most of the evidence-based youth gang programs address high levels of gang crime, serious violence, and juvenile delinquency. The results measured by these evaluations are: changes in the numbers of homicides or aggravated assaults, changes in the level of gang crime, or changes in arrest or recidivism rates. For example, the Boston Ceasefire successfully reduced youth homicides, gun assault incidents, and "shots fired" calls for service. Similarly, the Gang Violence Reduction Program in Chicago's Little Village Neighborhood significantly reduced serious violent and drug-related arrests.
- Results of evidence-based programs to prevent or reduce gang membership suggest that preventing or reducing the problem of gang membership is an especially challenging task. Two programs (Gang Resistance Education and Training and Gang Prevention Through Targeted Outreach) were offered on a larger scale. They showed modest success in changing attitudes about gangs or involving youth in alternative activities. However, measures of gang affiliation and delinquent behavior were inconclusive or not statistically significant. Three longitudinal studies of small scale childhood development programs (Child Development Project, Montreal Preventive Treatment Program, and Perry Preschool) reported higher levels of academic achievement and self-control, and less involvement in gang fights and other measures of delinquency that persisted over the long term.

B. Specific Programs and Practices

OLO identified four studies that describe programs or specific practices that appear to be especially relevant as Montgomery County moves ahead with the planning and implementation of programs to address the youth gang problem.

• Outreach and Referral. The evaluation of two programs developed by the Boys and Girls Clubs of America, the Gang Prevention Through Targeted Outreach (GPTTO) program and the Gang Intervention Through Targeted Outreach (GPPTO) program, examined the effectiveness of outreach and referral practices to identify and recruit at-risk youth in the community. The study reported direct outreach was the single most productive approach, followed by parent/relative referral. Successful recruitment through referrals, in turn,

required developing strong ties with community agencies and organizations that directed youths to the club.

- Assessment practices. An evaluation of the Project Broader Urban Involvement and Leadership Development (BUILD), a curriculum program taught to at-risk eighth grade students in Chicago, recommended working toward the development of an index to assess the degree to which youth are "at risk" for street gang membership.
- Collaboration. The goals of the Strategic Home Intervention and Early Leadership Development (SHIELD) program, developed by the Police Department in Orange County, CA, are to (1) identify youth who are likely to be at-risk, using contacts police make in the course of their day to day duties; and (2) provide a set of services tailored to meet their needs, using a multidisciplinary team of community, school and social service agency staff.
- **Data Management.** In response to an emerging gang problem in the mid-1990s, Orange County, CA developed a Gang Incident Tracking System (GITS). The evaluation of GITS discusses details such as the development of the data form and the reporting process, as well as the steps managers took to assess the reliability and validity of the GITS data.

II. LOGIC MODELS

A logic model is a diagram, a flow chart, or other design tool used to visually communicate, "the links in a chain of reasoning about 'what causes what' in relationship to a desired outcome or goal." This section briefly describes what a logic model is and how it can be useful as a component of program design.

To create a logic model, a group of managers, evaluators, and/or other stakeholders work collaboratively to identify a goal, measurable objectives, and outcomes that will signify achievement of the goal.

The objectives that are selected must be specific and measurable. Typically, each objective specifies:

- What will change, e.g., attitudes;
- Who will change, e.g., seventh grade students;
- How large the change will be, e.g., approval of peer smoking will decrease by 10 percent; and
- By when the change will occur, e.g., at a six-month follow-up.

Next, program planners identify at least one activity for each objective. One source of activities is evidence-based programs that have results comparable to the specified objectives. Or, planners can propose activities based on their understanding of local circumstances.

Finally, program planners and evaluators identify a set of process measures and outcome measures. Together, these measures allow an evaluator to assess whether a program has been faithfully implemented, and whether it has achieved the desired results. Process measures can

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⁷ Schmitz and Parsons No Date.

⁸ Chinman et al. 2004

track staff productivity or performance while outcome measures demonstrate the nature and degree of change that a program has had on program participants.⁹

There are many potential benefits to using a logic model in designing a program. A logic model helps:

- To assess whether a problem has been described accurately and succinctly;
- To ensure that a program will address objectives related to an overall goal;
- To identify desired outcomes which in turn helps to determine whether an evaluation is likely to produce meaningful results.

A logic model can also be useful for programs that are contracted out. Including a logic model as part of a Request for Proposal (RFP) can help ensure that the contractor is hired to provide a service that fits within goals of an overall strategy.

See Appendix F (© 10) for illustrative examples of two logic models: The Thunder Spirit Lodge completed by the University of Minnesota and The Bridgeport Safe Start Initiative completed by the Center for Women and Families of Eastern Fairfield County, Connecticut.

III. DEFINING WHAT WORKS –RISK FACTORS AND EVIDENCE-BASED PROGRAMS

The final reports of the Joint County Gang Prevention Task Force and the Montgomery County Gang Prevention Task Force recommended that the County implement programs that "address risk factors" and are "evidence-based". These local recommendations reflect a broader national trend to link social science and program evaluation research to program design and implementation.

This interdisciplinary approach relies on researchers to isolate various risk factors associated with a particular problem, rigorously evaluate the effectiveness and replicability of interventions designed to mitigate the problem, and develop model programs to disseminate information about what works. It relies on program administrators to implement model programs or innovative interventions that address the risk factors researchers identify. Finally, it calls upon those who implement programs to collect data over time in order to measure program outcomes.

Public and private agencies currently use this approach to address a range of public health problems, such as substance abuse, juvenile delinquency, youth violence and gang membership. Ideally, this framework establishes a system to direct public funds to proven, effective programs. The available research about risk factors and evidence-based programs both helps to define the problem and shape expectations about how to solve it. This section briefly introduces the concepts of risk factors and evidence-based programs, and describes the status of research about the problem of youth gangs.

A. Risk Factors

⁹ It is advisable to have more than one measure for each outcome in order to establish greater confidence in the validity of each one.

The term "risk factor" refers to a behavior or condition in the environment that increases the probability a person will suffer harm. Most risk factors result from social learning or the combination of some social learning and biological processes. The predictive value of a specific risk factor changes over time.

Risk factors often occur in clusters and the research suggests that a child who is exposed to multiple risk factors faces a higher level of risk. Although researchers acknowledge that risk factors interact, most of the research that has been done identifies and measures the predictive value of risk factors separately, without taking the influence of other factors into account.

Identifying specific risk factors that have an established empirical relationship to a problem, such as youth violence, can be a helpful tool for program design. As discussed in the Surgeon General's Report on Youth Violence, the limits of using risk factors must also be recognized. Specifically:

- No single risk factor or set of risk factors is powerful enough to predict with certainty that youths will become violent. For example, while poor performance in school is a risk factor, by no means will all young people who perform poorly in school become violent.
- Because public health research is based on observations and statistical probabilities in large populations, risk factors can be used to predict violence in groups with particular characteristics or environmental conditions but not in individuals.
- Given these two limitations, assessments designed to target individual youths for intervention programs must be used with great care. Most individual youths identified by existing risk factors for violence, even youths facing accumulated risks, never become violent.
- Risk factors that are not amenable to change (e.g., being born male) are not good targets for intervention.
- Of the risk factors that are amenable to change, some are not realistic targets of preventive efforts. For example, eliminating poverty is not a realistic short-term goal, but countering some of the effects of poverty is. 10

Risk Factors and Youth Violence. In 1998, researchers compiled information from dozens of studies to examine predictors of violence in adolescence and early adulthood. The goals of this major research effort were: (1) to determine which predictors had the strongest empirical association with future violence, and (2) to identify which risk factors should be used to define the target group for intervention.

Appendix G (© 13) presents the results of this research. It lists risk factors in order of significance for two age groups: early childhood (ages 6-11); and adolescence (ages 12-14). An OJJDP discussion of this study points out some notable comparisons between age groups:

• The best predictors of violent or serious delinquency differ by age group. The research results show substance use is among the best predictors of future violence for children ages 6-11, but not for children ages 12-14. On the other hand, involvement with antisocial peers

¹⁰ Surgeon General's Report on Youth Violence, Chapter 4

and the lack of social ties are strong predictors for violence in the 12-14 year old age group, but not for the 6-11 year old age group.

• For the 6-11 year old age group, the predictors in the second and third ranked groups are relatively fixed personal characteristics, e.g., gender, family socioeconomic status, and ethnicity. For the 12-14 year old age group, a larger number of predictors are behavioral characteristics, e.g., aggression, school attitude/performance, and committing physical violence.

Along with the predictive value of a risk factor, experts also recommend considering whether a risk factor is easy or difficult to change. For example, the research on risk factors for committing serious violence suggests that the strongest predictors for both age groups (i.e., general offenses and substance use for 6-11 year olds; weak social ties, delinquent peers and gang membership for 12-14 year olds) could respond to an intervention program. In contrast, some of the risk factors that were moderately predictive of violence for the 6-11 year old age group, such as family socioeconomic status and antisocial parents, are more difficult to change.

Risk Factors and Youth Gangs. The research into risk factors and youth gangs has explored two separate issues: identifying risk factors that predict gang membership, and assessing whether gang membership itself is a risk factor for committing serious violence and/or engaging in delinquent behavior.

Risk factors that predict gang membership. Researchers have many theories about youth gang membership, but no definitive answer to explain why young people join gangs. The research for risk factors that predict youth gang membership is in a formative state. Appendix H (© 14), excerpted from an OJJDP Juvenile Justice Bulletin, lists the risk factors for youth gang membership identified in various studies. It shows a multiplicity of factors across all domains.

Researchers have demonstrated that a cumulative impact exists, similar to the research about risk factors for youth violence. For example, one study of Seattle youth found children with seven or more risk factors were 13 times more likely to join a gang than those with none or one risk factor.¹¹

Compared to the extensive research on risk factors that predict serious violence, much more research is needed to clearly identify the unique risk factors for gang involvement, and to estimate the strength or weakness of each risk factor at various stages of youth development.

In the interim, the large number of possible risk factors associated with gang membership makes it difficult to decide how best to use risk factors in designing programs aimed at reducing gang involvement. In fact, the research evidences different expert opinions about how to proceed:

- One recommendation is to conduct an in-depth assessment of the crime problem to identify the most prevalent risk factors; 12
- A second recommendation is to use the risk factors for serious violence and juvenile delinquency because youth gangs and delinquency are closely related; ¹³ and

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¹¹ Hill et al. 2001

¹² Howell 1998

¹³ "Strategic Planning Tool" Frequently Asked Questions 2005

A third recommendation is to address multiple risk factors across multiple domains using a
comprehensive communitywide approach since isolated efforts to target a single risk factor
or a single domain are unlikely to have much success.¹⁴

Gang membership as a risk factor. As noted in the discussion of youth violence above, gang membership is a one of the strongest predictors of serious violence and juvenile delinquency for the 12-14 year old age group. Youth who participate in gangs are more likely than their nongang peers to commit violent crimes and property offenses. In the Seattle study, gang members, who made up 15 percent of the study sample, self-reported committing:

- 58 percent of all general delinquent acts;
- 51 percent of all minor assaults;
- 62 percent of all drug trafficking offenses; and
- 59 percent of all property offenses. 15

B. Evidence-Based Programs

Ideally, the phrase "evidence-based program" refers to a program for which a methodologically rigorous evaluation has demonstrated the program's services positively changed the participants' behavior as originally planned. As evidence-based program databases have become more prevalent, the range of acceptable evaluation standards has grown.

During the last decade, several federal and private agencies have established extensive databases of evidence-based programs to disseminate information about "what works" to practitioners in the field. For example,

- The Center for the Study and Prevention of Violence (CSPV) established the Blueprints for Violence Prevention (Blueprints) database to identify effective violence prevention programs.
- The Development Services Group for the OJJDP established the Model Programs Guide (MPG) database of scientifically proven programs designed to enhance accountability, ensure public safety, and reduce recidivism.
- The Substance Abuse and Mental Health Services Administration (SAMHSA) established the Model Programs database to identify evidence-based programs designed to prevent or reduce substance abuse and other related high-risk behaviors.
- The Surgeon General and the federal DHHS established the Youth Violence Program database to identify specific strategies and programs designed to reduce and prevent youth violence.

The agencies listed above share a common conceptual approach to developing and maintaining their databases. This approach includes:

• Soliciting program nominations and information about innovative program approaches;

¹⁴ Wyrick 2004

¹⁵ Hill et al. 2001

- Reviewing the strength of the supporting evaluation research; and
- Classifying programs based on their effectiveness.

Although their approaches are similar, each agency has adopted its own criteria for selecting programs for review, determining the scientific rigor of an evaluation, and classifying a program as "effective" or "not effective". Each agency has also adopted its own classification or naming system. A review of the selection and classification practices for the various databases shows that all four databases apply a rigorous set of guidelines.

The existence of multiple databases gives program managers access to a large volume of program approaches, based on an even greater number of programs. For example, the Center for the Study of Prevention of Violence Blueprints for Violence Prevention project has reviewed more than 500 programs, since it was established in 1996.

Evidence-Based Programs and Youth Gangs. The Gang Reduction Program is OJJDP's most recent initiative to address the problem of youth gangs. The goal of OJJDP's Gang Reduction Program is to "reduce youth gang crime and violence in targeted neighborhoods by helping communities take an integrated approach to applying proven practices in primary prevention, secondary prevention, suppression and re-entry."

To help communities implement the Gang Reduction Program, the National Youth Gang Center created a web-based Strategic Planning Tool that provides a database of "effective" or "promising" programs designed to address problems associated with juvenile delinquency and gangs. The National Youth Gang Center (NYGC) maintains the database to disseminate information about innovative and effective programs to practitioners in the field. To create its database, the NYGC searched existing databases maintained by CSPV, SAMSHA and the Surgeon General for programs that prevent or reduce gang involvement or programs that reduce delinquency, or aggressive or disruptive behavior.

APPENDIX A – DEFINITIONS AND TERMS

Evaluation research uses several terms that have specific technical meanings. This appendix defines some key terms to help the reader understand the different types of evaluations and research design structures.

A *process evaluation* examines how a program was implemented and how it operates in practice, to determine whether the program is providing services as intended. The process of documenting a program's operation can help explain a program's performance. It also provides information for potential replication.

An *outcome evaluation* shows whether made a difference, in terms of the problem that led to the creation of the program in the first place. It measures changes to the problem identified initially (e.g., too many homicides) and determines whether the changes are due to the services the program delivered.

Different kinds of "outcome evaluation" have different levels of scientific rigor. An outcome evaluation that has a non-experimental design can report general observations about the positive or negative effects of a program; however, it cannot make any definitive statements about program impact. In contrast, an outcome evaluation that uses an experimental design can report with a high degree of certainty both the effect of the program and statistical significance. Specifically:

- An experimental design collects comparative data to measure changes in two groups of people, a treatment group and a control group. An evaluation that uses an experimental design randomly assigns individuals to either group, ensures groups are matched on demographic characteristics, and compares the results to determine the program effects. This design is considered the gold standard because the results of these studies can be used to establish a measurable cause and effect relationship and the impact of a program.¹⁶
- A quasi-experimental design collects comparative data to measure changes in a treatment group and a control group; however, the research does not randomly assign people to one group or another or cannot control which group gets the treatment. Examples of this type of design include a comparison group pre-test/post test design, or a multiple time series design. These types of evaluations place a priority on generating impartial, accurate, and valid information. They are often used when random assignment is not possible. This design could be considered the silver standard because the results of these studies can be used to draw causal conclusions; however, the lack of random assignment adds uncertainty to the results.
- A non-experimental design uses purposeful sampling techniques to collect data. These
 designs typically use qualitative data sources such as interviews, observation, and focus
 groups. The evaluation designs include case studies and participatory approaches. This
 design could be considered the bronze standard in terms of scientific rigor because the results
 of these studies provide a rich sense of the program impacts but cannot be used to draw
 causal conclusions.

¹⁶ Source: OLO and Harvard Family Research Project, Selected Evaluation Terms, March 2002.

APPENDIX B – METHODOLOGY

OLO conducted a comprehensive, systematic search of electronic and print literature to identify youth gang programs. OLO limited its search to programs that specifically targeted the activities of gangs or gang members or programs that measured a gang related outcome.

OLO's primary sources of program information were The National Youth Gang Center database of programs that addressed the risk factors of gang membership and the Office of Juvenile Justice and Delinquency Prevention's report *Youth Gang Programs and Strategies*. OLO supplemented these sources with program information from the Surgeon General's *Youth Violence* report, the Center for the Study and Prevention of Violence's *Blueprints for Violence Prevention*, and *Preventing Crime: What Works, What Doesn't. What's Promising. A Report to the United States Congress*.

OLO's initial search identified 64 programs. OLO dropped 26 of these programs from further review, because they did not address gangs or measure gang outcomes, they did not did not appear to have any evaluation research, or there program information was too limited. An indepth review of the remaining 38 programs showed these programs differed both in the rigor of the supporting research as well as their reported results. OLO sorted these programs into three categories, based on the strength of their research design and the direction of their reported results.

- Category I, Proven Positive Results. Eleven programs have evaluations that used experimental or quasi-experimental research designs, and the results of the evaluation demonstrates that the program made a positive change.
- Category II, Proven Mixed Results. Twelve programs have evaluations that used experimental or quasi-experimental research designs; however, the results of the evaluation found a mix of positive and negative outcomes.
- Category III, Unproven Promising Results. Fifteen programs in report positive outcomes based on a formative evaluation, preliminary evaluation results or other data.

Appendices C, D and E list the specific programs in each category. The tables identify the type of program, the target population, and the implementation setting and dates for each program and provide a brief description of the evaluation results.

APPENDIX C - PROGRAM LISTINGS FOR CATEGORY I - PROVEN POSITIVE RESULTS

Program Title	Type of Program	Target Population	Evaluation Results	Implementation Settings and Dates
Child Development Project	Prevention	Elementary school students and families	Significantly reduces early substance use and risky behaviors, such as gang fights, carrying weapons, and making violent threats.	Nationwide in elementary schools, 1980s
Montreal Preventive Treatment Program	Prevention	Boys ages 7-9 from low income families	Promotes pro-social skills and self control. At age 12, participants less likely to report minor offenses. At 15, participants less likely to report gang involvement, drug use, having friends arrested.	Montreal, 1990s
Movimiento Ascendencia	Prevention	At-risk Mexican American girls ages 10-17	Participants showed reductions in multiple measures of delinquency compared to control group.	Pueblo, CO, 1990s
Perry Preschool	Prevention	African American children ages 3-4 in low income families	Over a 35-year follow-up period, participants had higher levels of academic achievement, and less delinquency, including less involvement in gang fights, and a lower incidence of teenage pregnancy.	Ypsilanti, Michigan, 1962-1967
Gang Prevention Through Targeted Outreach (GPTTO) and Gang Intervention Through Targeted Outreach (GITTO)	Prevention/ Intervention	At-risk youth	Evaluation after one-year showed clubs successfully attracted and involved youth at high-risk of gang involvement. Evaluation could not definitively show whether clubs prevented or stopped gang membership, although preliminary evidence showed more participation could prevent or reduce gang related delinquent activities.	Nationwide in 21 clubs that used the prevention approach and three clubs that used the intervention approach, 1997

PROGRAM LISTINGS FOR CATEGORY I – PROVEN POSITIVE RESULTS (CONTINUED)

Program Title	Type of Program	Target Population	Evaluation Results	Implementation Settings and Dates
Broader Urban Involvement and Leadership Development (BUILD)	Prevention/ Intervention	At-risk 8 th grade youth and juvenile offenders	Prevention program participants were less likely to join gang than members of control group. Intervention program participants had a lower recidivism rate than control group members.	Prevention program – select middle schools, 1980s, Intervention program – Cook County Juvenile Detention Center, Chicago, IL 1980s – to present
Aggression Replacement Training	Intervention	Juvenile offenders, gang members	Promotes skill acquisition, improves anger control and increases constructive behaviors. Participants in gang intervention project in NYC had lower arrest rates during eight month period following program than control group members (13% v. 52%).	Nationwide including probation departments and detention centers in New York, Texas, and Washington, 1987 to present
Lifeskills '95	Intervention	Juvenile offenders	Promoted self control and positive decision making. Fewer participants associated with former gang associates compared to control group (8% v. 27%)	San Bernardino and Riverside, CA, 1995
Tri-Agency Resource Gang Enforcement Team (TARGET)	Intervention	Gang members and gangs	Successfully incarcerated hardcore gang members. Gang crime decreased 11% in 1992. Showed a cumulative reduction of 47% through 1997.	Orange County, CA, 1995
Boston Ceasefire	Suppression	Violent offenders and gang members	Program may have been effective in reducing youth homicides, gun assault incidents, and "shots fired" calls for service.	Boston, MA, 1996. Replicated in other cities including Minneapolis, St. Louis and Los Angeles
Operation Hardcore	Suppression	Habitual gang offenders	Program achieved fewer dismissals, more convictions, and a higher rate of state prison commitments compared to cases handled through normal prosecutorial process.	Los Angeles, CA, 1979 to Present

Source: OLO obtained information from two sources, Howell 2000 and "Strategic Planning Tool" 2005. See these sources for primary source information.

APPENDIX D - PROGRAM LISTINGS FOR CATEGORY II - PROVEN MIXED RESULTS

Program Title	Type of Program	Target Population	Evaluation Results	Implementation Settings and Dates
Gang Resistance Education and Training (GREAT)	Prevention	All students	Two year follow-up results showed no significant differences in attitudes or behaviors. Four year follow-up results showed more negative views of gangs and other positive outcomes. Reductions in gang affiliation and delinquency were not statistically significant. Current program structure has not been evaluated.	Nationwide in middle schools, 1990s – present.
Participate and Learn Skills (PALS)	Prevention	Children ages 5-15 living in public housing	Delinquency charges for participants declined compared to control group members; however, family and teacher surveys revealed no significant changes between groups in behavior at home or school.	Ottawa, 1980
Building Resources for the Intervention and Deterrence of Gang Engagement (BRIDGE)	Intervention	Gang involved youth ages 12- 22	Participants had fewer arrests for serious violence, non-serious violence, and drugs compared to control group; however, no evidence of effect on gang involvement.	Riverside, CA, 1995
Crisis Intervention Services Project	Intervention	At-risk youth and gang members	Reduced individual serious and violent crimes but not overall crime rates.	Chicago, IL, 1980s
Ladino Hills	Intervention	Gang members	Initial research showed reduced gang cohesiveness and fewer arrests but follow-up evaluation attributed original effects to fewer gang members and showed effects were not sustained.	Los Angeles, CA, 1967

PROGRAM LISTINGS FOR CATEGORY II – PROVEN MIXED RESULTS (CONTINUED)

Program Title	Type of Program	Target Population	Evaluation Results	Implementation Settings and Dates
San Diego Repeat Offender Prevention Program (ROPP)	Intervention	Released gang- involved juvenile offenders, ages 12-17	No significant difference in percentage of participants or control group members who had court petition filed; however, program participants had more positive outcomes, such as fewer positive drug tests and better school outcomes.	San Diego, CA, 1997
Civil Gang Injunctions	Suppression	Gang members	Initial results showed modest immediate improvements in community safety and well-being but no significant changes in intermediate or long term outcomes.	Los Angeles, CA, 1980s
Dallas Anti- Gang Initiative	Suppression	Gang communities/ Members	Largest declines in violent gang-related offenses occurred in areas that used curfews and truancy enforcement. Areas that used high visibility saturation did not show a statistically significant decline in gang related violence.	Dallas, TX,1996
Los Angeles Operation Ceasefire	Suppression	Gang members	Coordinated community approach differed from planned intervention but reduced youth violence. Gang crime decreased more rapidly in target area but overall violent crimes decreased by identical rates.	Los Angeles, CA, 2000
Richmond, CA Comprehensive Homicide Initiative	Prevention/ Intervention/ Suppression	At-risk youth, gang members	Results showed program significantly reduced homicides but effect on gang crime was mixed.	Richmond, CA, 1995

PROGRAM LISTINGS FOR CATEGORY II - PROVEN MIXED RESULTS (CONTINUED)

Program Title	Type of Program	Target Population	Evaluation Results	Implementation Settings and Dates
Comprehensive Gang Model ¹	Prevention/ Intervention/ Suppression	Youth gang members and older gang members (ages 12-24)	Results mixed among five sites. Participants at successful sites had fewer arrests. Results at one site showed no effect on gang membership. Results at other sites showed no effect on arrests and increases or no changes in gang membership.	Mesa, AZ; Riverside, CA; San Antonio, TX; Tucson, AZ; Bloomington, IL, 1990s
Gang Violence Reduction Program/ Little Village*	Prevention/ Intervention/ Suppression	Older gang members (ages 17-24)	Project significantly reduced serious violent and drug related arrests among participants. Project was more effective with older, more violent gang offenders than with younger, less violent offenders. Project was less effective changing pattern of gang crime in community.	Chicago, IL, 1995

Source: OLO obtained information from three sources, Howell 2000 and "Strategic Planning Tool" 2005. See these secondary sources for primary source information.

¹ See OLO Memo *Follow-up Information on the OJJDP Comprehensive Gang Model* (May 3, 2005) for more details on the Comprehensive Gang Model.

APPENDIX E – PROGRAM LISTINGS FOR CATEGORY III – PROMISING RESULTS

Program Title	Type of Program	Target Population	Evaluation Description and Results	Implementation Settings and Dates
Community Neutral Zone	Prevention	At-risk youth ages 13-20	Program provides place for youth at high-risk for joining a gang to congregate. Evidence suggests program may be linked to possible reduction in juvenile crime	Mountlake Terrace, WA, 1990s
Gang Resistance is Paramount (GRIP)	Prevention	2 nd , 5 th and 9 th grade students	Participants are more likely to have negative perceptions of gangs and gang activities	Paramount, CA, elementary and middle schools, 1981 to present.
Chicago Area Project	Prevention/ Intervention	At-risk youth, community	CAP has been effective in organizing local communities and reducing juvenile delinquency	Chicago, IL, 1943 to present.
House of Umoja	Prevention/ Intervention	At-risk youth ages 15-18	Program provides sanctuary and life skills training. Successfully brokered truce among warring gangs.	Philadelphia, PA, 1970s to present
L.A. Bridges	Prevention/ Intervention	At-risk youth ages 10-14	Prevention program provides case management for youth and families; intervention program works with gangs to develop peace treaties. Preliminary evaluation shows promising results.	Los Angeles, CA,1990s
Strategic Home Intervention and Early Leadership Development (SHIELD)	Prevention/ Intervention	At-risk youth	Police identify at-risk youth and conduct risk assessments for general delinquency and gang involvement. May forward results to team in local school to coordinate services. Formative evaluation showed program youth who participated in youth academy improved attendance and grade point average.	Westminster, CA, 1996
Intensive Supervision Juvenile Probation Program	Intervention	Juvenile offenders on probation	Non-control comparison showed nearly 60% of participants were not charged with new offense. There was no control group comparison.	Peoria County, IL, 1990s

PROGRAM LISTINGS FOR CATEGORY III – PROMISING RESULTS (CONTINUED)

Program Title	Type of Program	Target Population	Evaluation Description and Results	Implementation Settings and Dates
Philadelphia Youth Violence Reduction	Intervention	Gang members ages 14-24	An evaluation of ten years of data showed declines youth homicide in two targeted districts were greater than decline citywide.	Philadelphia, PA, 1999
Se Puede	Intervention	Gang involved youth, ages 10-17	Evaluation attributes declines in gang membership and active gang involvement to program.	San Juan, TX, 1996
Violence-Free Zones	Intervention	Community	Community organizations provide job training and work opportunities, replicating House of Umoja program in Philadelphia and Alliance for Concerned Men program in Washington, D.C. No reported outcome data.	Nationwide sites, 1997
Chicago Alternative Policing Strategy (CAPS)	Suppression	Community	Promotes police partnerships with local residents to identify and respond to local crime problems. Violent and property crime decreased 49% between 1991-2002.	Chicago, IL, 1993 to present.
Columbus Community Oriented Policing	Suppression	Community	Problem oriented policing model reported to successfully target violent street gangs responsible for number of gang related homicides and other violent crimes.	Columbus, OH, 1995
Operation Culde-Sac	Suppression	Gang communities/ members	Evaluation of traffic barriers to block vehicle access showed homicides and assaults declined and were not displaced to other areas.	Los Angeles, CA, 1990
Operation Safe Streets	Suppression	Gang members	Special police unit maintains contact with gang members and investigates crimes committed by targeted street gangs. No outcome data reported.	Los Angeles, CA, 1979
Youth Firearms Violence Initiative	Suppression	Gang members and at-risk youth	Decrease in gang activity, gun- related crimes, and violent crimes	Nationwide sites, 1995

Source: OLO obtained information from secondary sources Howell 2000, Butler 2004, and "Strategic Planning Tool" 2005. Primary references are available in secondary sources.

APPENDIX G: RANKING OF AGES 6-11 AND AGES 12-14 PREDICTORS OF VIOLENT OR SERIOUS DELINQUENCY AT AGES 15-25

Predictors at Ages 6-11	Predictors at Ages 12-14			
Rank 1	Group			
General offenses (.38)	Social ties (.39)			
Substance use (.30)	Antisocial peers (.37)			
Rank 2	Group			
Gender (male) (.26)	General offenses (.26)			
Family socioeconomic status (.24)				
Antisocial parents (.23)				
Rank 3	Group			
Aggression (.21)	Aggression (.19)			
Ethnicity (.20)	School attitude/performance (.19)			
	Psychological condition (.19)			
	Parent-child relations (.19)			
	Gender (male) (.19)			
	Physical violence (.18)			
Rank 4	Group			
Psychological conditions (.15)	Antisocial parents (.16)			
Parent-child relations (.15)	Person crimes (.14)			
Social ties (.15)	Problem behavior (.12)			
Problem behavior (.13)	IQ (.11)			
School attitude/performance (.13)				
Medical/physical characteristics (.13)				
IQ (.13)				
Other family characteristics (.12)				
Rank 5 Group				
Broken home (.09)	Broken home (.10)			
Abusive parents (.07)	Family socioeconomic status (.10)			
Antisocial peers (.04)	Abusive parents (.09)			
	Other family characteristics (.08)			
	Substance abuse (.06)			
	Ethnicity (.04)			

Source: Hawkins et al. 2000.

Note: The value in parentheses is the mean correlation between the predictor and the delinquency outcome. Correlation is the degree to which one variable (such as serious delinquency) is associated with or can be predicted from another variable (such as substance use). A higher correlation value indicates a stronger relationship between the predictor and the outcome. For example, having antisocial peers (.37) at ages 12-14 is a stronger predictor of serious delinquency than having abusive parents (.09).

APPENDIX I - LIST OF RESOURCES

Aos, Steve, Roxanne Lieb, Jim Mayfield, Marna Miller, and Annie Pennucci. "Benefits and Costs of Prevention and Early Intervention Programs for Youth." Washington State Institute for Public Policy. September 2004. http://www.wsipp.wa.gov/

Arbreton, Amy J.A. and Wendy S. McClanahan. "Targeted Outreach: Boys and Girls Clubs of America's Approach to Gang Prevention and Intervention." Public/Private Ventures. March 2002. http://www.ppv.org/ppv/publications/assets/148_publication.pdf

"An Assessment of Gang Activity in Montgomery County." Montgomery County Collaboration Council. September 2004.

Barnoski, Robert. "Washington State's Implementation of Functional Family Therapy for Juvenile Offenders: Preliminary Findings." Washington State Institute for Public Policy. 2002

"Blueprints for Violence Prevention Selection Success." Blueprints Fact Sheet, Center for the Study and Prevention of Violence. 1998.

Braga, Anthony A., David M. Kennedy, Elin J. Waring, and Anne M. Piehl. "Problem-Oriented Policing, Deterrence, and Youth Violence: An Evaluation of Boston's Operation Ceasefire." Journal of Research in Crime and Delinquency 38, no. 3. August 2001.

"Broader Urban Involvement and Leadership Development (BUILD) Homepage." Accessed March 2004. http://www.buildchicago.org/home/index.htm

Burch, Jim and Candice Kane. "Implementing the Office of Juvenile Justice and Delinquency Prevention Comprehensive Gang Model." Office of Juvenile Justice and Delinquency Prevention Fact Sheet. July 1999 #112.

Burghardt, John et al. "Does Job Corps Work? Summary of the National Job Corps Study." Mathematica Policy Research, Inc. June 2001. http://www.mathematica-mpr.com/publications/PDFs/jobsummfinal.pdf

Butler, Gavin, James Hodgkinson, Elizabeth Holmes, and Sally Marshall. "Evidence Based Approaches to Reducing Gang Violence. A Rapid Assessment for Aston and Handsworth Operational Group." GOWM and Home Office Regional Research Team. July 2004.

Carlie, Mike. "Into the Abyss: A Personal Journey into the World of Street Gangs." Online book. Last updated February 24, 2005. http://www.faculty.smsu.edu/m/mkc096f/default.htm

Catalano, Richard F., Rolf Loeber, and Kay McKinney. "School and Community Interventions to Prevent Serious and Violent Offending." Office of Juvenile Justice and Delinquency Prevention Juvenile Justice Bulletin. October 1999.

Chinman, Matthew, Pamela Imm and Abraham Wandersman. "Getting to Outcomes 2004." RAND Health. January 2004.

http://www.rand.org/pubs/technical_reports/2004/RAND_TR101.pdf

"Community Policing in Chicago, Year Ten. An Evaluation of Chicago's Alternative Policing Strategy." Chicago Community Policing Evaluation Consortium. April 2004. http://www.northwestern.edu/ipr/publications/policing_papers/Yr10-CAPSeval.pdf

"Comprehensive Gang Model Website." National Youth Gang Center and the Institute for Intergovernmental Research. www.iir.com/nygc/acgp/model.htm

Coolbaugh, Kathleen and Cynthia J. Hansel. "The Comprehensive Strategy: Lessons from the Pilot Sites." Office of Juvenile Justice and Delinquency Prevention Juvenile Justice Bulletin. March 2000.

Dishion, T. J., & Andrews, D. W. "Preventing Escalation in Problem Behaviors with High-risk Young Adolescents: Immediate and 1-year Outcomes." Journal of Consulting and Clinical Psychology, 63, 538-548. 1995.

Earls, Felton J. "Violence and Today's Youth." Critical Health Issues for Children and Youth Vol. 4 No. 3. Winter 1994.

Esbensen, Finn-Aage. "Preventing Adolescent Gang Involvement." Office of Juvenile Justice and Delinquency Prevention Juvenile Justice Bulletin. September 2000.

"Final Report and Recommendations." Montgomery County Gang Prevention Task Force. October 2004.

Fritsch, Eric J., Tory J. Caeti, and Robert W. Taylor. "Gang Suppression Through Saturation Patrol, Aggressive Curfew, and Truancy Enforcement: A Quasi-Experimental Test of the Dallas Anti-Gang Initiative." Crime and Delinquency, Vol. 45 No. 1. January 1999.

"Gang Resistance Education and Training (G.R.E.A.T) Overview." Promising Practices Network Website. Accessed March 2005. http://www.promisingpractices.net/program.asp?programid=112

Gant, Frances and Peter Grabosky. "PALS: Reducing Anti-Social Behaviour Through Sport and Cultural Activities." Australian Institute of Criminology, 2000. http://www.aic.gov.au/publications/rpp/31/rpp31-22.html

Goldstein, Arnold P. and Barry Glick. "Aggression Replacement Training: Curriculum and Evaluation." Simulation and Gaming, Vol. 25 No. 1. March 1994.

Gottfredson, Gary D. and Denise C. Gottfredson. "Gang Problems and Gang Problems in a Sample of Schools: Summary." Gottfredson Associates, Inc. October 2001.

Gottfredson, Gary D., Denise C. Gottfredson, and Ellen R. Czeh. "Summary: National Study of Delinquency Prevention in Schools." Gottfredson Associates, Inc. November 2000.

"A Guide to Assessing Your Community's Youth Gang Problem." Office of Juvenile Justice and Delinquency Prevention. June 2002.

Hill, K. G., Lui, C., and Hawkins, J. D. "Early Precursors of Gang Membership: A Study of Seattle Youth." Office of Juvenile Justice and Delinquency Prevention Bulletin. Youth Gang Series. Washington, DC. 2001.

"How Logic Models Can Help NIDRR Grantees Plan and Demonstrate Progress." Research Exchange, Volume 9, Number 2. 2004. http://www.ncddr.org/du/researchexchange/v09n02/1_logic.html

Howell, James C. "Guide for Implementing the Comprehensive Strategy for Serious, Violent, and Chronic Juvenile Offenders." Office of Juvenile Justice and Delinquency Prevention. May 1995. http://www.ncjrs.org/pdffiles/guide.pdf

Howell, James C. "Youth Gang Programs and Strategies: Summary." National Youth Gang Center and Institute for Intergovernmental Research. August 2000.

Howell, James. "Youth Gangs." Office of Juvenile Justice and Delinquency Prevention Fact Sheet. December 1997 #72.

Howell, James. "Youth Gangs: An Overview." Office of Juvenile Justice and Delinquency Prevention Juvenile Justice Bulletin. August 1998.

Howell, James, Arlen Egley Jr., and Debra Gleason. "Modern-Day Youth Gangs." Office of Juvenile Justice and Delinquency Prevention Juvenile Justice Bulletin. June 2002.

"The Joint County Gang Prevention Task Force Final Report." Joint County Gang Prevention Task Force. September 2004.

Kennedy, David M., Anthony Braga, and Anne Piehl. "Reducing Gun Violence: The Boston Gun Project's Operation Ceasefire." National Institute of Justice. September 2001. http://www.ncjrs.org/pdffiles1/nij/188741.pdf

Kent, Douglas R. and Peggy Smith. "Chapter 25 – The Tri-Agency Resource Gang Enforcement Team: A Selective Approach to Reduce Gang Crime." From the Modern Gang Reader. Roxbury Publishing Company. 2001.

Kent, Douglas R., Stewart I. Donaldson, Phelan A. Wyrick, and Peggy Smith. "Evaluating Criminal Justice Programs Designed to Reduce Crime by Targeting Repeat Gang Offenders." Evaluation and Program Planning Volume 23, pgs. 115-124. 2000.

Kimmel-Milizter, Karen and Staci Kimball. "The Montgomery County Comprehensive Strategy: A Juvenile Justice Plan." Montgomery County Department of Health and Human Services and Maryland State Department of Juvenile Justice. July 1999.

Lasley, James. "Designing Out Gang Homicides and Street Assaults." National Institute of Justice. November 1998.

"Latino Gangs in Montgomery County." Latino American Advisory Committee. January 2004.

Lipsey, Mark W., David B. Wilson, and Lynn Cothren. "Effective Intervention for Serious Juvenile Offenders." Office of Juvenile Justice and Delinquency Prevention Juvenile Justice Bulletin. April 2000.

Little, Pricilla. "Selected Evaluation Terms." Harvard Family Research Project. March 2002.

Lurigio, Arthur J., Gad J. Besinger, S. Rai Thompson. "A Process and Outcome Evaluation of Project Build: Years Five and Six." Department of Criminal Justice, Loyola University, Chicago. January 2000.

Maxson, Cheryl L., Karen Hennigan, David Sloane, and Kathy A. Kolnick. "Can Civil Gang Injunctions Chang Communities? A Community Assessment of the Impact of Civil Gang Injunctions." National Institute of Justice. April 2004. http://www.ncjrs.org/pdffiles1/nij/grants/208345.pdf

McClanahan, Wendy S. "Alive at 25: Reducing Youth Violence Through Monitoring and Support." Public/Private Ventures. June 2004. http://www.ppv.org/ppv/publications/assets/174_publication.pdf

Mihalic, Sharon F. "Agency and Practitioner Rating Categories and Criteria for Evidence Based Programs." Blueprints Initiative, Center for the Study and Prevention of Violence. No Date.

National Gang Crime Research Center Website. Last updated January 19, 2005. http://www.ngcrc.com/index.html

National Youth Gang Center Website. Last updated January 28, 2005. http://www.iir.com/nygc/default.htm

"Outcomes of the Gang Violence Reduction Program." Illinois Criminal Justice Information Authority, Volume 4, Number 3. August 2003.

"Preventative Treatment Program." Blueprints for Violence Prevention. Center for the Study and Prevention of Violence. No Date. http://www.colorado.edu/cspv/blueprints/promising/programs/BPP12.html

Redding, Richard E. "Characteristics of Effective Treatments and Interventions for Juvenile Offenders." Juvenile Forensic Evaluation Resource Center. 2000. www.ilppp.virginia.edu/Juvenile Forensic Fact Sheets/CharEffTreat.html

Reed, Winifred and Scott Decker, eds. "Responding to Gangs: Evaluation and Research." National Institute of Justice. July 2002. http://www.ncjrs.org/pdffiles1/nij/190351.pdf

Scales, Bob and Julie Baker. "Seattle's Effective Strategy for Prosecuting Juvenile Firearm Offenders." Office of Juvenile Justice and Delinquency Prevention Juvenile Justice Bulletin. March 2000.

Schwenhart, Lawrence J. "The High/Scope Perry Preschool Study Through Age 40. Summary, Conclusions, and Frequently Asked Questions." High/Scope Educational Research Foundation. No date.

Schinke, Steven P., Mario Orlandi and Kristin Cole. "Boys and Girls Clubs in Public Housing Developments: Prevention Services for At-Risk Youth." Journal of Community Psychology. OASP Special Issue, 1992.

Schmitz, Connie C. and Beverly A. Parsons. "Everything You Wanted to Know about Logic Model but Were Afraid to Ask." No Date. http://www.insites.org/documents/logmod.htm

Sherman, Lawrence W., Denise Gottfredson, Doris MacKenzie, John Eck, Peter Reuter, and Shawn Bushway. "Preventing Crime: What Works, What Doesn't, and What's Promising." National Institute of Justice Report to the United States Congress. July 1998. http://www.ncjrs.org/works/index.htm

Spergel, Irving et al. "Gang Suppression and Intervention: Problem and Response. Research Summary." Office of Juvenile Justice and Delinquency Prevention. October 1994. http://www.icjia.state.il.us/public/pdf/ResearchReports/LittleVillageGVRP.pdf

Spergel, Irving and Kwai Ming Wa. "The Little Village Gang Violence Reduction Project in Chicago." Illinois Criminal Justice Information Authority. 2003. http://www.icjia.state.il.us/public/pdf/ResearchReports/LittleVillageGVRP.pdf

Spergel, Irving et al. "Evaluation of the Gang Reduction Project in Little Village: Final Report Summary." School of Social Service Administration, the University of Chicago. 2002. http://www.icjia.state.il.us/public/pdf/ResearchReports/GVRP Eval.pdf

Spergel, Irving, Kwai Ming Wa, and Rolando Villareal Sosa. "Evaluation of the Bloomington Comprehensive Gang Program." School of Social Service Administration, the University of Chicago. October 2001.

Spergel, Irving, Kwai Ming Wa, and Rolando Villareal Sosa. "Evaluation of the Mesa Gang Intervention Program." School of Social Service Administration, The University of Chicago. October 2002.

Spergel, Irving, Kwai Ming Wa, and Rolando Villareal Sosa. "Evaluation of the Riverside Comprehensive Community-Wide Approach to Gang Prevention, Intervention and Suppression." School of Social Service Administration, the University of Chicago. October 2003.

Spergel, Irving, Kwai Ming Wa, and Rolando Villareal Sosa. "Evaluation of the San Antonio Comprehensive Community-Wide Approach to Gang Prevention, Intervention and Suppression Program." School of Social Service Administration, the University of Chicago. June 2004.

Spergel, Irving, Kwai Ming Wa, and Rolando Villarreal Sosa. "Evaluation of the Tuscon Comprehensive Community-Wide Approach to Gang Prevention, Intervention and Suppression." School of Social Service Administration, the University of Chicago. October 2004.

"Strategic Planning Tool." Office of Juvenile Justice and Delinquency Prevention. 2005. http://www.iir.com/nygc/tool/.

Thompson, David W. "The B.U.I.L.D. Prevention Programs: An Evaluation." No date.

Thorton, Timothy, Carole Craft, Linda Dahlberg, Barbara Lynch and Katie Baer. "Best Practices by Youth Violence Prevention: A Sourcebook for Community Action." National Center for Injury Prevention and Control, the Center for Disease Control. June 2002. http://www.cdc.gov/ncipc/dvp/bestpractices.htm

Tita, George, K. Jack Riley, Greg Ridgeway, Clifford Grammich, Allen Abrahamse, and Peter W. Greenwood. "Reducing Gun Violence: Results from an Intervention in East Los Angeles." RAND Public Safety and Justice. 2003. http://www.rand.org/publications/MR/MR1764/MR1764.pdf

Trembley, Richard E. "Montreal Longitudinal Experimental Study." Prevention and Treatment, Volume 4, Article 1. Posted March 30, 2001. http://journals.apa.org/prevention/volume4/pre0040001app19.html

Trembley, Richard E., Linda Pagani-Kurtz, Louise C. Masse, Frank Vitaro, and Robert O. Phil. "A Bimodal Preventative Intervention for Disruptive Kindergarten Boys: Its Impact Through Adolescence." Journal of Consulting and Clinical Psychology, Volume 63, Number 4, 560-568. 1995.

Vernon, Robert L. and James R. Lasley. "Police/Citizen Partnerships in the Inner City." FBI Law Enforcement Bulleti. May 1992.

Wyrick, Phelan and James Howell. "Strategic Risk Based Response to Gangs." Juvenile Justice: Causes and Correlates, Findings and Implications." Volume 9, Number 1. September 2004.

http://www.ncjrs.org/html/ojjdp/summary_2000_8/contents.html

[&]quot;Youth Gang Programs and Strategies." Office of Juvenile Justice and Delinquency Prevention Summary. August 2000.

[&]quot;Youth Violence: A Report of the Surgeon General." Office of the Surgeon General. 2001. http://www.surgeongeneral.gov/library/youthviolence/default.htm